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GLOBAL REACH LAYDOWN FROM DESERT SHIELD TO ENDURING FREEDOM: A COMPARATIVE ANALYSIS

by

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Preface

The war on terrorism has once again brought into focus the crucial importance of the United States Air Force core competency termed "rapid global mobility." The ability to airlift massive amounts of personnel, equipment, supplies, and firepower anywhere in the world in not months or weeks, but days and sometimes hours, is now a necessity for our nation in this era of globalization and revolutions in information technology.

Rapid global mobility entails more than $200 million C-17s, enormous C-5s, and highly trained aircrews. It also involves a crucial capability that for years has worked tirelessly out of the attention of senior leaders and the public. Termed "Global Reach Laydown (GRL)," or the ability to establish an air mobility base where one never existed or expand the capabilities of an airfield to handle airlift, GRL was suddenly thrust into the limelight during Operation ENDURING FREEDOM.

The research for this paper was taken from open sources and includes personal interviews, the experience of the author during the Gulf War and during TALCE deployments in Afghanistan, a review of after action reports and RAND studies, and interviews with GRL personnel. The model used to compare GRL assets between the Gulf War (DESERT SHIELD), Operations in Kosovo (ALLIED FORCE), and Afghanistan (ENDURING FREEDOM) was taken from the author's thesis from the USA Command and General Staff College entitled, "Strategic Airlift Inefficiencies from Desert Shield to Vigilant Warrior" and modified for this paper. To adequately explain this model, significant portions of Chapter Two of this paper were

taken from that thesis and documented accordingly. The ENDURING FREEDOM portion of this paper was edited and expanded from a paper submitted for the "Logistics of Waging War" elective in Air War College the author took in the fall of 2002.

Abstract

The purpose of this paper is to analyze the evolution of Global Reach Laydown (GRL) from the Gulf War (DESERT SHIELD) through ALLIED FORCE (Kosovo) and ENDURING FREEDOM (Afghanistan). This is important because of the implications for the emerging USAF CONOPS termed "Global Mobility Task Force." Although in all three of these contingencies GRL units performed their missions effectively, safely, and professionally, there were many lessons learned.

A GRL model is used to analyze and compare these three contingencies. Variables in this model including availability of bases, communications, supply, training and readiness, command relations, user education, and use of guard and reserve personnel. Major conclusions include the need for Air Mobility Command (AMC) to better support their GRL units, the need to educate users on how to effectively utilize these assets, the requirement to finally resolve recurring supply problems, and the need to better integrate reserve and national guard personnel.

With the war on terrorism predicted to take years to fight, and the multiple flashpoints of terrorist activity already documented in over fifty nations, the increasing need to improve the GRL concept is apparent. It is therefore essential for these recommendations to be implemented expeditiously.

Chapter 1

Introduction

Those logistic professionals [TALCEs], they are like the linemen of a football team. They get no recognition, they get no appreciation. But we cannot move without them.[1]

General Gregory Martin, Commander of U.S. Air Forces Europe

Overview

Bagram Air Base, Afghanistan, 27 December 2001: As we walked on the dirt road leading from the airfield ramp to the TALCE/MST compound, which was near the control tower, we entered an environment that few experience except in books and in the movies. Some of the images that were indelibly etched into my mind include the nearly overpowering darkness, the outlines of dead trees devoid of any vegetation, the piles of twisted metal and other wreckage from years of war, the piles of dirt and lack of grass, and the bomb and bullet scarred buildings, especially the control tower next to which our compound was located and would soon grow. It reminded me of the scenes from the HBO min-series "Band of Brothers" as U.S. soldiers entered devastated French towns on their trek towards Germany.[2]

Into the Belly of the Beast: TALCEs Deploy into Afghanistan.

In his book *The Transformation of American Air Power*, Benjamin Lambeth spends much time discussing stealth, precision guided munitions, information warfare, unmanned aerial vehicles, and other impressive technologies that Hollywood has latched onto in recent movies. He defines this transformation as the point where airpower "has finally become truly strategic in its potential effects."[3] However, he spends only one paragraph discussing a key part of the transformation of air power that is perhaps the most limiting factor in America's current war on terrorism: air mobility.[4] But Lambeth is not alone in this oversight. The USAF Air War

College has given it limited attention also, offering one elective course and hosting a visit by the commander of U.S. Transportation Command (USTRANSCOM).

One does not have to look further than the evening news to see the impact of the shortage of air mobility assets in the war on terrorism. With the on going operations in Afghanistan, the massive deployment towards Iraq which increases daily, anti-terrorist operations in Yemen and the Philippines, and an emerging nuclear crisis with North Korea, air mobility units are stretched very thin. At first it appears impressive that the United States can be engaged in all these theaters simultaneously, but a discerning look reveals serious concerns. These include the predicted length of deployments to Southwest Asia, the cancellation of the President's trip to Africa in February which would have required large numbers of C-17s and C-5s, both of which are in short supply, and the use of sealift to move military equipment and supplies to Southwest Asia over the last several months to compensate for the shortfall in airlift.

Clearly, air mobility is an essential part of the transformation of airpower, and it involves much more than expensive aircraft and highly trained aircrews. As important are the en route and forward operating bases and the ability to quickly establish those bases. This capability is called Global Reach Laydown (GRL) and is the subject of this paper.

Thesis

The thesis of this paper is that the employment of GRL units has improved from DESERT SHIELD through ALLIED FORCE and ENDURING FREEDOM, but more improvements need to be made. Unfortunately, many in the USAF do not fully understand the importance of GRL, including some in Air Mobility Command which trains and deploys these units. The air mobility-intensive contingency in Afghanistan and other recent crises have illustrated the need for military and political leaders to pay much more attention to all aspects of

rapid global mobility, including the little known units called Tanker Airlift Control Elements (TALCEs) and the Contingency Response Group (CRG) which constitute the bulk of GRL units.

Key Terms and History of GRL

In 1994, under the leadership of General Ronald R. Fogleman, then the Commander of Air Mobility Command (AMC) and Commander in Chief of US Transportation Command (USTRANSCOM), a white paper was written entitled "In Support of Global Reach."[5] This paper explained how AMC would redefine, restructure, and operate an air mobilty system that would be more responsive to the post-Cold War era. A key tenant of this new strategy was the ability to rapidly expand and/or establish the worldwide en route system through a Global Reach Laydown (GRL) strategy.[6] This White Paper defined this GRL strategy as the ability to "rapidly establish AMC presence and infrastructure where none existed or to expand the fixed portion of the en route system to support increased air mobility operations." [7]

To support units that would deploy to establish the en route and forward operation locations (FOLs) to support this GRL strategy, AMC created Air Mobility Operations Groups (AMOGs).[8] The two AMOGs today include the 621st AMOG at McGuire AFB in New Jersey, and the 615th AMOG at Travis AFB in California. AMOGs train and equip forces that comprise the mobile GRL units termed Tanker Airlift Control Elements (TACLEs). The term "TALCE" was created in 1994 when the AMOGs were established.[9] A Mission Support Team (MST) is a smaller TALCE which is led by a non-commissioned officer and has the same mission as a TALCE but on a smaller scale.[10]

TALCEs were formerly known as Airlift Control Elements (ALCEs) which had been in existence for years. During the Vietnam War, numerous ALCEs were deployed throughout Southeast Asia.[11] The basic organization and concept of operations of today's TALCEs began to

take shape just after Vietnam, when the C-130s were sent to Military Airlift Command (MAC) in 1975.[12] These ALCEs were tasked to support airlift at locations where support was either very limited or nonexistent. The ALCEs would also train users from all four services on how to get the most out of the airlift system during peace and war.

The mission of the TALCEs is to establish air mobility operations in all types of environments, from modern airports to the most austere combat zones. They provide three basic functions: command and control, aerial port, and aircraft maintenance, but additional functions can be added as needed including security forces, medical, finance and contracting, public affairs, translators, and many others.[13] TALCEs have a twelve hour response time, which means once they get a deployment order, they must begin loading onto aircraft just twelve hours later.

A good way to picture a TALCE is this: about a hundred airmen, normally led by a senior captain or field grade officer that deploys to set up a miniature and temporary McGuire, Dover, McCord, McConnell, or other air mobility base anywhere in the world. The AMOGs are a key part of TRANSCOM's "first strike" capability; once an airfield is secured, the TALCEs are normally the second team in, and only four hours after their arrival they can begin receiving aircraft. An October 2001 article in the *New York Times* described the TALCEs as "the special forces of logistics," and the nickname of the 621st AMOG—"The Devil Raiders"-- summarizes that description very accurately.[14]

Airlift planners sometime forget the amount of lift required for a TALCE. A good rule of thumb is this: for a maximum on the ground (MOG) of four C-17s, twenty-four hours a day, seven days a week in a bare base, medium threat environment, planners should use a one hundred person TALCE to be deployed on five C-17s. This TALCE is completely self-contained and carries DRASH tents with environmental control units (ECUs), MREs and water

for five days, generators, the famous Mobility Air Reporting Communications (MARC) system, ammunition and other firepower, various types of material handling equipment (MHE), at least two pickup trucks, and several conexes and pallets full of additional equipment.

But AMOGs and their TALCEs are not the only part of GRL. The 86th Contingency Response Group (86th CRG), USAFE's "TALCE," based at Ramstein Air Base, Germany, has a similar mission. It provides a "first-in initial operational and support force to assess, prepare, operate and defend a staging base for Expeditionary Aerospace Forces deploying in response to any contingency."[15] The 86th CRG was created in 1999 and replaced the USAFE TALCE which was also located at Ramstein AB.[16] Like the AMOG TALCEs, the CRG provides aerial port, C2, and aircraft maintenance, but unlike the AMOG TALCEs it has permanently assigned security and medical forces for even faster response and greater team integrity.[17] CRGs use substantially less airlift than TALCEs do, usually thirteen C-130s to deploy sixty personnel and their equipment into a bare base environment.[18]

One quickly realizes the crucial importance of GRL when it is linked to the broader concepts of Air Expeditionary Forces (AEF) and the Global Mobility Task Force (GMTF) Concept of Operations (CONOPS). General Jumper's manic push to make the USAF into a truly expeditionary force, termed AEF, has made mobility forces even more important. Ironically, as of this writing the USAF has only 45 C-17s available on a daily basis while it pushes ahead for the next two generations of fighter aircraft.[19] Helping to focus the AEF-structured USAF on the most probable missions is the emerging Task Force CONOPS.[20] These include Global Response Task Force, Global Strike, Global Mobility, Space and C4ISR, Nuclear Response, and AEF.[21] The GMTF involves rapid deployment operations, humanitarian relief, non-combatant evacuation, and expeditionary combat support.[22] According to General Jumper,

"The Task Force CONOPS will help guide our tactical and operational level training as we develop the doctrine to deal with the scenarios we anticipate."[23] TACLEs and other GRL units will be a key part of the GMTF.[24]

Importance of GRL to Rapid Global Mobility

TALCEs and CRGs are invaluable to rapid global mobility because of their ability to quickly deploy worldwide, set up operations just hours after arrival, and then working 24/7 to offload personnel, equipment, firepower, supplies, and anything else that can fit inside an aircraft. The essential role of the ALCE/TALCE concept has been successfully proven scores of times in just the last thirty years. Some examples include Operation NICKLE GRASS in 1973 when the first scheduled airlift mission to Israel carried an ALCE, DESERT SHIELD when the first American aircraft to land in Saudi Arabia carried an ALCE from McGuire, and in 1994 in Rwanda when one of the first units to arrive in Mombasa, Kenya, was a TALCE.[25] ALCEs/TALCEs were also used in Somalia, Haiti, the Balkans, and during many disaster assistance operations. The TALCE concept seems tailor made to support today's EAF.

AEFs are required to deploy and place "bombs on target" just 48-hours after receiving an execution order.[26] However, current logistics processes are unable to support this aggressive timeline, and a recent RAND study suggested that global infrastructure preparation is "a central function of planning expeditionary support."[27] This study recommended prepositioning support as far forward as possible to greatly help in meeting this timeline, and discussed the need to field numerous FOLs to "provide a range of employment time lines for operational use."[28] Ironically, this study never mentioned anything about TALCEs or the CRG which operate at FOLs and are a key to rapid global mobility.

The TALCEs and CRG are especially invaluable today because of the few fixed bases throughout the world the U.S. maintains. In 1989, the Air Force had twenty-five major bases and four hundred smaller installations overseas; today it has just six major bases and seventy-eight smaller installations.[29] In addition, many contingencies in the last twelve years have been to countries where none of these bases and installations existed, requiring the unique capabilities of the TALCEs and CRG even more. Deployments during Operations DESERT SHIELD, ALLIED FORCE, and ENDURING FREEDOM were additional examples of the TALCEs and the CRG establishing FOLs in austere, medium-threat environments.

The GRL model

In the groundbreaking thesis, "Strategic Airlift Inefficiencies from DESERT SHIELD to VIGILANT WARRIOR," a model is presented which compared air mobility operations in Kuwait, Somalia, Rwanda, and Haiti to the Gulf War.[30] This model consisted of two groups of variables labeled planning and basing. Planning variables include the use of operational plans (OPLANS), Time Phased Force and Deployment Lists (TPFDLs), communications with airlift planners and airlift users, closure rates, Command and Control (C2) systems, in-transit visibility (ITV), and use of the Joint Operation Planning and Execution Systems (JOPES).[31] Basing variables include the availability of airfields, use of aerial refueling, stage bases, communications, use of Global Reach Laydown packages, and trained personnel.[32] The overall conclusion of that thesis was that strategic airlift inefficiencies improved during these contingencies, but that more remained to be accomplished, especially in educating users on how to get the most out of the air mobility system.[33]

Because GRL was only a small part of the original model of strategic airlift inefficiency, a modified model is used for this analysis. This GRL model will examine the following aspects

of the use of ALCEs, TALCEs, and CRGs during Operations ALLIED FORCE and ENDURING FREEDOM using DESERT SHIELD as a baseline: availability of bases both en route and in theater, communications, supply, training and readiness of GRL personnel, command relationships, education of users, and total force integration. These variables are defined as follows:

- Availability of bases: Were there adequate numbers of en route and forward operating bases (FOBs)?[34]
- Communications: Were adequate communications available at GRL locations, including voice and data including secure communications, ITV, and the Global Decision Support System (GDSS)?
- Supply: Were GRL units adequately supplied? This variable includes Material Handling Equipment (MHE).
- Training and Readiness of personnel: Were personnel adequately trained for the demanding GRL mission? This includes training in primary career field and the ability to operate in an austere, medium threat environment.
- Education of users: Were the primary users (or customers to use a now out of favor Total Quality Management term) familiar with GRL units prior to working with them on that particular deployment?
- Command relations: Was the chain of command clear and effective? Were there problems determining the "ownership" of GRL units?
- Total Force integration: Were guard and reserve personnel effectively utilized?
- Mission accomplishment: Was the mission of GRL units accomplished in terms of contributing to the success of the entire contingency?

As this analysis will show, GRL units have continued to accomplish their missions effectively, safely, and professionally, often under austere and dangerous conditions. But while they have matured steadily from the Gulf War through ALLIED FORCE and ENDURING FREEDOM, continued improvements need to be made to ensure this priceless but little understood capability remains effective. This is especially important because GRL units are being utilized at an accelerating pace due to the war on terrorism's enormous reliance on air mobility.

Notes

[1] Eric Schmitt and James Dao, "Busy Skies Over Asia Controlled From U.S.," *New York Times*, October 14, 2001, B4.

[2] Lt Col Phil Bossert, "Into the Belly of the Beast: TALCEs Deploy into Afghanistan," *Airlift/Tanker Quarterly*, Fall 2002, 34.

[3] Benjamin S. Lambeth, *The Transformation of American Air Power* (Ithaca: Cornell University Press, 2000), 298

[4] Lambeth, 142-143.

[5] Colonel Greg Cook, "From Global Reach Laydown to Global Mobility Task Force: Evolution of the Air Mobility Operations Group—AMC's Rapid Response Force, *Airlift/Tanker Quarterly*, Fall 2002, 25, 27.

[6] Ibid, 27.

[7] Ibid, 27.

[8] *Air Mobility Master Plan* (Scott Air Force Base, IL: HQ Air Mobility Command, Oct 1996), 2-8.

[9] Briefing, 615th/621st Air Mobility Operations Groups (AMOGs), subject: AMOG Vision: In Support of Global Reach 2000, 25 January 2001.

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[15] "2002 Stakeholder's Report; 86th Airlift Wing Contingency Response Group," 86th CRG, Ramstein AB, Germany, 2002, 1.

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[22] Ibid, 1.

[23] Ibid, 1-2.

[24] "Global Mobility Task Force." Briefing given at the A/TA convention, 9 Nov 02.

[25] *Airlift/Tanker Quarterly*, Summer 2002, 9.

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[28] Ibid, 13.

[29] Schmitt, B4.

[30] Philip A. Bossert, Jr., "Strategic Airlift Inefficiencies from DESERT SHIELD to VIGILANT WARRIOR," (US Army Command and General Staff College: Fort Leavenworth, Kansas, 1995).

[31] Ibid, iii.

[32] Ibid, iii.

[33] Ibid, 89.

[34] Philip A. Bossert, Jr., "Strategic Airlift Inefficiencies from DESERT SHIELD to VIGILANT WARRIOR," (US Army Command and General Staff College: Fort Leavenworth, Kansas, 1995), 97.

Chapter 2

DESERT SHIELD

In the main, this unprecedented airlift operation was very successful. Yet by many measures the strategic airlift system did not appear to attain its expected performance level.[1]

Project Air Force Analysis of the Air War in the Gulf

Overview

The Gulf War airlift remains to this day the largest airlift in history, making the Berlin airlift pale in comparison. In fact, during DESERT SHIELD and continuing through DESERT STORM, Military Airlift Command (MAC) moved ten times the daily ton-miles of the Berlin Airlift.[2] The Gulf War marked the first major strategic deployment of combat units by air, and the rapid deployment of these units helped keep the Iraqis from threatening other nations, especially Saudi Arabia.[3] But while this airlift was successful, there were numerous problems which prevented all forces from closing on time for the start of DESERT STORM. This airlift was successful despite major shortcomings because of "a superb resource base plus five and one-half months to prepare."[4]

One of the first units to arrive in the Gulf on 7 August 1990 was the Airlift Control Element (ALCE) from McGuire Air Force Base. This unit established operations at Dhahran, Saudi Arabia, and would handle fifty-nine percent of all strategic airlift missions in the Area of Operations (AOR).[5] Interestingly, this ALCE arrived three hours before the first USAF combat

aircraft—F-15Cs from the 1st Tactical Fighter Wing at Langley AFB—began arriving. Additional ALCEs were soon deployed to Riyadh, Cairo, King Fahd, Oman, and other locations.[6] They all experienced various problems as the GRL model now explains.

The GRL model

There was an insufficient number of bases supporting this airlift, both in Europe and in the AOR. Throughout DESERT SHIELD, eighty-four percent of MAC's strategic airlift missions transited just four European bases.[7] The situation in the AOR was worse. Even though the U.S. had spent considerable funds on expanding and improving several airfields in Southwest Asia, many infrastructure improvements were needed including additional ramp space and fuel hydrants.[8] Dhahran handled fifty-nine percent of the strategic lift missions, Riyadh handled eight percent, Jubail eight percent, and various other airfields the rest.[9] With few bases, the airlift system quickly became clogged. Lieutenant General Kondra, the AMC Director of Operations during this airlift, summarized this situation:

> We had a four foot opening trying to push airlift through that 7,000 mile long hose and come out a 4" nozzle at the other end. It doesn't work very well. You've got to have the offload bases to handle what you're putting into that flow.[10]

It took almost two months to get additional bases in the AOR, and users took over three months to begin using locations other than Dhahran.[11]

Communications were overwhelmed during DESERT SHIELD. MAC command, control, and communications were so poor that it was characterized as "essentially useless," causing the deployment to be "anything but well executed."[12] The Global Decision Support System (GDSS), the main MAC C2 system at the time, was typically eighteen hours behind schedule, and therefore became by default an "after action reporting system" rather than an execution system.[13] In-transit Visibility (ITV), which is "the ability to track the identity, status, and

location of DOD unit and non-unit cargo and passengers, medical patients and personal property from origin to destination during peace, contingencies, and war", was poor.[14] Incorrectly marked pallets, no common data base, and excessive classification of loads resulted in two football field's worth of undeliverable cargo at one location in Southwest Asia.[15] There was a shortage of secure telephones called "STU-IIIs" and computerized flight plans for aircrews were often not available because many ALCEs did not have the equipment to receive them.[16] MAC's Division of Analysis and Modeling stated in October 1990: "Automated systems were simply not up to the task…nor was adequate communications capability available en route and in theater to conduct MAC operations efficiently."[17]

Supply problems were equally severe and caused significant backlogs in the airlift system. Besides suffering shortages of essential communications equipment, ALCEs coped with inadequate spare parts for Material Handling Equipment (MHE). MHE are specially designed vehicles used to load and offload military and commercial aircraft, usually handling palletized cargo. The MHE vehicles were built in the 1960s and broke down often in the harsh desert climate and because of constant use.[18] A shortage of MHE spare parts resulted in five of ten 25K loaders, a common type of MHE, to be broken at Dhahran by September 1990.[19] A RAND study concluded that, "MHE problems did slow down the airlift flow by restricting the maximum number of aircraft that could be handled at a base at a given time."[20]

Although most deployed ALCE personnel performed superbly, the few that did not raised concerns about training and readiness.[21] RAND reported that some personnel lacked "necessary experience," and that "MAC needs to provide manuals and training to command post personnel."[22] Prior to DESERT SHIELD, ALCE personnel participated in numerous exercises and contingencies, and these experiences minimized other problems with training.

Poor Command and Control (C2) and lack of understanding about the ALCE mission impacted command relations. ALCEs supporting the strategic airlift mission remained under Combatant Command (COCOM) to USTRANSCOM via an Area of Operation (AOR) Air Mobility Division (AMD). COCOM is "nontransferable command authority establish by title 10…exercised only by commanders of unified or specified combatant commands unless otherwise directed by the President or the Secretary of Defense."[23] This was not a significant problem during DESERT SHIELD, but general support of ALCE personnel by fellow airmen sometimes was. For example, at Dhahran, the 1st TFW commander prohibited ALCE personnel from eating in their dining hall and forced them to find quarters with the 82nd Airborne Division.[24] CINCTRANS, General H.T. Johnson described this situation: "We were treated worse than any foreign country would treat us."[25]

Two-thirds of ALCE capability is in the Guard and Reserves.[26] During the Gulf War the President did not authorize a Reserve activation until 23 August 1990, more than two weeks into the deployment.[27] Because GRL units have a requirement to begin deploying in just hours, the initial ALCE units that deployed were almost exclusively active duty personnel.

Summary

The biggest airlift in history thus serves as a model to compare subsequent contingencies that used GRL assets. In most measures of the GRL analytical model, ACLEs during DESERT SHIELD suffered from significant problems including a shortage of bases to establish airlift operations, communications, supply, training and readiness, command relations, education of users, and total force integration. These shortfalls "prevented optimal performance of the airlift

system."[28] Ironically the resulting inefficiencies were not severe enough to prevent the airlift system from accomplishing its overall mission. As General Schwarzkopf stated:

> Operation DESERT SHIELD was the fastest build up and movement of combat power across greater distances in less time than at any other time in history. It was an absolutely gigantic accomplishment, and I can't give credit enough to the logisticians and transporters who were able to pull this off.[29]

However, in an ominous foreshadowing of the state of the air mobility system today, the *Gulf War Air Power Survey* stated over ten years ago: "Future wars may or may not be preceded by nearly six months in which to prepare. The potential outcome with a different mix of resources and time deserves consideration."[30]

Notes

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[12] Ibid, 35.
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[16] Ibid, 42.
[17] Ibid, 42.
[18] Ibid, 42.
[19] Ibid, 43.
[20] Ibid, 43.
[21] Ibid, 43.
[22] Ibid, 44.

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[25] Ibid, 44.
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[30] Ibid, 45.

Chapter 3

ALLIED FORCE

The deployment of forces to Operation ALLIED FORCE was not problem-free. Although the commitment and ingenuity of transportation planners, as well as the dedication of the men and women responsible for actually moving units and their critical equipment and supplies overcame these difficulties, there is room for improvement.[1]

Report to Congress: ALLIED FORCE After-Action Report

Overview

Operation ALLIED FORCE was the U.S. led NATO campaign to end Serbian atrocities against Albanians living in Kosovo.[2] While the official air campaign lasted for seventy-eight days from 24 March 1999 to 10 June 1999, AMC's involvement began on 19 February and continued long after the bombing ceased.[3] USAF participation in ALLIED FORCE included four separate operations including NOBLE ANVIL (the American component of the NATO war against Serbia), TASK FORCE HAWK (the movement of a US Army Aviation Brigade Combat Team of AH-64 Apache Helicopters), SHINING HOPE (humanitarian relief operation to aid hundreds of thousands of refugees), and JOINT GUARDIAN (NATO-led peacekeeping force in Kosovo).[4]

AMC deployed TACLEs and MSTs to various locations within the AOR, and USAFE deployed its just-created Contingency Response Group (CRG). While ALLIED FORCE was clearly a success, GRL experienced many similar problems from the Gulf War. Although

considered a Small Scale Contingency (SSC), from an air perspective this was certainly a Major Theater War (MTW) operation. AMC aircraft flew 2,231 missions carrying 37, 460 passengers and 59,055 short tons of cargo.[5] One hundred fifty-nine KC-10s and KC-135s deployed to Europe and delivered 355.8 million pounds of fuel to 23,095 receivers.[6] The overriding GRL trend between DESERT SHIELD and ALLIED FORCE was the huge efforts of mobility personnel overcoming enormous obstacles to accomplish the mission. These efforts are summarized in the following GRL model.

The GRL model

GRL units were deployed to eleven bases within the AOR, with Tirana, Albania, hosting an AMC TALCE and the USAFE CRG.[7] In mid-March, the 86th CRG arrived at Rinas Airfield, Tirana, Albania, and several weeks later the 621st TALCE from McGuire AFB arrived.[8] When the TALCE had completed its mission, it redeployed, leaving the CRG in place. By the time the air campaign had ended in June, over 1,000 U.S. and Allied aircraft were based at twenty-five locations throughout Europe.[9] Bedding down and supporting this force was a major undertaking, and GRL units were essential to this effort. Compared to DESERT SHIELD, ALLIED FORCE relied on well-established roads, rail lines, and commercial carriers all operating in a smaller AOR.[10]

In preparation for deployment, USAFE conducted site surveys of twenty-seven locations in eleven NATO and Eastern European countries.[11] These site surveys allowed logistics planners to adjust deployment timelines and reduce airlift requirements.[12] However, according to a RAND study, "political and policy barriers slowed the site survey and bed down processes, and necessary site preparation activities at bare bases further delayed deployments."[13] Other problems that delayed the deployment of GRL units included changes in host nation support, use

of site survey checklists designed for deliberate planning instead of crisis action planning, and delays obtaining timely diplomatic clearances for site survey teams which subsequently slowed the deployment of GRL assets.[14]

Although Europe is not considered the third world, some bases made available for allied use were very austere, including those in the Balkans. These, especially Tirana, Albania, were austere, with poor infrastructure, low Maximum on the Ground (MOG) capability, poor lighting and many host nation restrictions.[15]

Communications showed improvement from the Gulf War, but significant problems persisted. In-transit Visibility (ITV) is a case in point. According to the *Report to Congress on Kosovo,* "Asset visibility continues to mature within the military transportation system. However, there is still room for significant improvement."[16] By having ITV, a unit's movement en route can be changed as operational requirements dictate. ITV personnel discovered lots of missing data that users never inputted, causing them to contact users on telephones rather than relying on much faster automated systems.[17] According to Lt Col Mike Marra, commander of the 86th Air Mobility Squadron which is a key squadron of the 86th CRG, "ITV was non-existent since we didn't have the capability at the time right after standup."[18] Without adequate ITV, GRL units did not have adequate lead time for inbound shipments, causing delays offloading and MOG limitations often being exceeded. In ALLIED FORCE, a more effective ITV capability, "could have greatly enhanced overall operational flexibility."[19]

Another communications problem included the ability to bring all deployment data together into one single source. The Global Transportation Network (GTN) was created by TRANSCOM for this purpose, but despite years of work and tens of millions of dollars, there was "a lack of

adequate feeder systems and associated communications support needed to collect and fuse this data."[20]

Other communications systems for GRL units fared better. The 86th CRG was well equipped with four International Maritime Satellite (INMARSAT) phones (two secure and two non-secure), STU-IIIs, a fax system, SATCOM radio, internet access, and UHF and VHF radios.[21] In fact, their capability was so impressive that many other units deployed to Tirana, including numerous allied forces, used these assets to the point of over-saturation. The TALCE that was deployed to Tirana to support TASK FORCE HAWK was similarly well equipped with communications. GDSS worked well for the CRG, but it suffered from out of date schedules. In addition, NATO and other foreign aircraft were not tracked, causing the CRG to implement a first in – first out priority system, certainly not ideal for an efficient operation.[22]

The supply system for GRL units did not show significant improvement since DESERT SHIELD. A RAND study concluded that overall, the supply distribution system was "insufficient to support FOLs…"[23] The CRG at Tirana often found itself at the bottom of the supply priority system, with no central theater authority assigning specific priorities to individual items needed "downrange."[24] One example was their urgent need for Hesco Bastion force protection barriers. The 86th CRG was located less than sixty miles from the Kosovo border, making them the most forward deployed ground force in the AOR, and they fully expected and prepared for an attack.[25] Ironically, charcoal for TASK FORCE HAWK units' cookouts arrived before CRG Hesco bastions arrived![26] However, one good news story was MHE. There were no significant problems with MHE in theater, unlike DESERT SHIELD.

Effective training and readiness of GRL personnel paid big dividends. When the CRG was deployed for ALLIED FORCE, they had only been activated three weeks before and were at

sixty percent strength.[27] At Tirana, trained aerial porters, maintainers, and communications specialists all performed safely and effectively.[28] Public affairs and OPSEC training were heavily utilized as Tirana became a media hub.[29] Additional in-country training included primary career field such as aerial port, maintenance, and command and control, and also the ability to operate in an austere, medium threat environment. However, because the CRG was activated just prior to this deployment, much training had yet to be accomplished. The CRG innovatively established training programs at Tirana, and many newly assigned personnel who still had their families living in the Temporary Living Facilities (TLF) at Ramstein were quickly and effectively trained.[30]

Many units in the USAF and other Services questioned the CRG's role at Tirana. Some were concerned with the major leadership role it was playing.[31] While the role of the 621st TALCE was confined to TASK FORCE HAWK, the CRG was involved with the entire airfield, and thus found itself dealing with the Albanian embassy downtown, all Services, and numerous Private Volunteer Organizations (PVOs), International Organizations (IOs), and allied nations. The CRG recommended in its after action report that users "must be educated to change their paradigms."[32]

Command relations were not a significant problem for GRL units during this contingency. The 86th CRG was COCOM to EUCOM via the Air Mobility Operations Control Center (AMOCC) at Ramstein AB, Germany.[33] The 621st Air Mobility Operations Group TALCE deployed to Tirana was under Tactical Control (TACON) to EUCOM.[34] TACON is defined as command authority over forces that "is limited to the detailed direction and control of movements or maneuvers" necessary to accomplish a mission.[35] While operationally the chain of command was clear for GRL units in Albania, at the tactical level it became confusing. The

command relationships for SHINING HOPE were not established for almost three weeks and then took another two weeks to implement.[36] Over forty nations and one hundred relief organizations were eventually involved at Tirana in all four operations, especially SHINING HOPE, including the United Nations High Commission for Refugees and the Organization for the Security of Central Europe.[37] An organization named the Emergency Management Group (EMG) brought these entities together to coordinate their operations, and the CRG commander played a major leadership role by leading the military meeting of this group.[38]

ALLIED FORCE was the first time a Presidential Selected Reserve Call-up (PSRC) of Air National Guard (ANG), reserve aircrews, and maintenance personnel was used.[39] In addition, Air Reserve Component (ARC) communications personnel augmented bare base operations.[40] However, the CRG did not utilize any ARC personnel because none were ever assigned to it.[41]

Summary

GRL units, primarily the 86th CRG and the 621st TALCE, both deployed to Tirana, Albania, performed exceptionally well despite many continuing challenges identified from DESERT SHIELD. ALLIED FORCE was a great success due in part to the ability to rapidly deploy units into an austere theater and to support those units. However, deployment timelines were much longer than required and proved that the USAF still needed to make major improvements. As the RAND report on ALLIED FORCE concluded and accurately predicted, "The CONUS-heavy basing structure combined with the need to rapidly deploy forces present significant support and deployment challenges."[42] Two years later during ENDURING FREEDOM, some of these problems were still a thorn in the side of the GRL community.

Notes

[1] "Report to Congress: Kosovo/Operation ALLIED FORCE After-Action Report," (Washington, D.C.: U.S. Congress, 31 January 2000), 31.

[2] "Air Mobility Command 1999 Operations," AMC, 2. Provided via e-mail from Mr. Robert Cossaboom, HQ AMC Historian, 21 October 2002.

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[5] Brunkow, 35.

[6] Ibid, 35.

[7] Ibid, 35.

[8] Case Study on the 86th Contingency Response Group (CRG) Rinas Airport, Tirana, Albania Deployment," (Ramstein AB, Germany: 86th CRG), 37-38, 1, 14.

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[10] Amatzia Feinberg and Eric Peltz, "Supporting Expeditionary Aerospace Forces: Lesson From the Air War Over Serbia," (Santa Monica, CAA: RAND Corporation, 2002), 11.

[11] Report to Congress, 37.

[12] Ibid, 37.

[13] Feinberg, xxi.

[14] Ibid, xxi.

[15] "Kosovo Operations," briefing to Lt Gen Roger G. Thompson, Jr. Deputy Commander in Chief, USTRANSCOM, Scott AFB, IL, Sep 1999.

[16] Report to Congress, 37.

[17] Feinberg, 30.

[18] E-mail with Lt Col Michael Marra, 86th AMS/CC, 22 January 2003.

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[20] Report to Congress, 39.

[21] "Case Study on the 86th Contingency Response Group (CRG) Rinas Airport, Tirana, Albania Deployment," (Ramstein AB, Germany: 86th CRG), 37-38.

[22] E-mail with Lt Col Michael Marra, 86th AMS/CC, 22 January 2003.

[23] Feinberg, xxvii.

[24] Case Study on 86th CRG, 23.

[25] Ibid, 8-9.

[26] Ibid, 23.

[27] Ibid, 3.

[28] Ibid, 1-3.

[29] Ibid, 18.

[30] Ibid, 29.

[31] Ibid, 57.

[32] Ibid, 57.

[33] Ibid, 2.

[34] Brunkow, 35.

[35] Joint Publication 3-0, *Doctrine For Joint Operations*, 10 September 2001, GL-17.

[36] Brunkow, 54.

[37] Ibid, 6.
[38] Ibid, 6-7.
[39] Congressional Testimony, General Tony Robertson, House Armed Service Readiness Subcommittee, 26 October 1999, 2.
[40] Briefing: "Kosovo Operations: Transportation Summary, USTRANSCOM.
[41] E-mail with Lt Col John Laub, 86th CRG/CD, 20 January 2003.
[42] Feinberg, 2.

Chapter 4

ENDURING FREEDOM

ENDURING FREEDOM efforts to date have been tremendous. The operation was, and continues to be, very complex. Not only has TRANSCOM simultaneously supported five combatant commanders involved in worldwide operations in the War on Terrorism, but it was forced to operate in Afghanistan, one of the most austere operating areas ever experienced by modern military forces.[1]

General John W. Handy, Commander, USTRANSCOM

Overview

For the first twelve months of the War on Terrorism, USTRANSCOM transported 215,000 passengers and 298,000 short tons of equipment and supplies by air on more than 12,840 missions to Afghanistan.[2] This airlift is the third largest in history, with the Gulf War airlift the biggest and the famous Berlin Airlift in second place.[3] As with DESERT SHIELD and ALLIED FORCE, ENDURING FREEDOM used GRL assets extensively, with TALCEs deployed to fourteen locations and the 86th CRG deployed to Manas, Kyrgyzstan.[4]

Just seven days after the 11 September 2001 attacks, the 621st AMOG deployed three TALCEs to bases in the Persian Gulf. Seven weeks later they redeployed, only to have two additional TALCEs deploy into Bagram Air Base and Kandahar Airfield, Afghanistan in December 2001. By the following April, all 225 airmen and officers—active duty, guard, and reserve--who were from all five AMOG squadrons, team McGuire, and other bases, had returned

safely, their missions completed. The CRG was deployed to Manas from 16 December 2001 to 1 March 2002.[5] Additional TACLEs and MSTs were deployed in the AOR, including a TALCE to Uzbekistan. As the GRL model will show, familiar problems plagued both the TALCEs and CRG during these deployments which were in the most austere and hostile locations any GRL units had deployed into since Vietnam. But once again, they accomplished their missions extraordinarily well.

The GRL model

Availability of bases was again problematic, with diplomatic efforts securing an adequate number of en route and FOLs. The success of these efforts at obtaining airfields can be summarized when one reviews the locations TALCEs and CRGs were deployed to: Uzbekistan, Kyrgyzstan, Afghanistan, Qatar, UAE, Oman, among others. Despite the impressive non-stop flights of B-2 bombers from Missouri to targets throughout the world, the continuing need to secure diplomatic support for forward bases will clearly continue.

The experiences of Major General Chris Kelly at Manas airfield near Bishkek, Kyrgyzstan, illustrate what future GRL deployments will probably face: deployments into third world nations where no GRL units have been to. When he was notified on 4 December 2001 that he would be deploying with the 86th CRG to Manas, he began his pre-mission preparation by first attending a series of briefings at AMC headquarters at Scott AFB.[6] Kelly quickly discovered that there was no Status of Forces (SOFA) agreement with Kyrgyzstan and the specific number of allied aircraft to be located there was still being determined. When he arrived at Manas on 17 December 2001 with the small advance team from the CRG, they found an airfield that had over one-hundred wrecked aircraft and facilities that were in poor condition.[7]

He discovered the invaluable help the US embassy staff provided in dealing with the airport and local staffs, but it was two months before any force structure arrived.

TALCEs that deployed to Bagram AB and Kandahar, Afghanistan, deployed into a war zone. Entirely self supportive, they brought everything they needed and operated for over two months at each location, with additional support provided by the US Army.[8] These conditions were much worse than Manas where CRG personnel initially stayed in hotels downtown and force protection was less of a concern. The experiences of the TALCEs and CRG during ENDURING FREEDOM point out the continuing need to hone skills such as joint, multinational, and interagency operations. The CRG's use of a "Coalition Forces Coordinator" to assist allied forces working with them is an example of the changing nature of GRL deployments.[9]

Communications continued to improve during these deployments, making significant advances from the Gulf War. ITV was more effective along with GDSS.[10] However, not all missions were in GDSS, and the CRG would simply call the Tanker Airlift Control Center (TACC) at Scott AFB IL to get updates.[11] The biggest shortfall the TALCEs experienced was a shortage of Iridium phones.[12] At Kandahar, the TALCE discovered that it did not have interoperable communications with the US Marines stationed there, and coordination of flight times was difficult.[13] The CRG did not deploy with SATCOM radios that had data capability.[14] This forced them to read their daily Situation Reports (SITREPS) using secure voice to C2 agencies, which was a time-consuming and awkward process.[15] What was impressive was that at Bagram and Kadahar the US Army provided SIPRNET to both TALCEs within weeks after the TALCEs arrived.

Ironically, the TACC would often call TALCEs at Kandahar and Bagram for departure information.[16] Technically, the TACC should have been getting this from the AMD via GDSS, but when the TACC was often asked about this their reply was, "Their phones are always busy!" It is ironic that hundreds of millions of dollars in Information Technology (IT) investment by TRANSCOM since the Gulf War stills results in DSN telephone calls over unsecure lines in a war zone!

Supply problems continued for both TALCEs and CRGs. Over 1,305 short tons of TALCE support equipment was deployed, including aircraft maintenance packages, MHE, communication suites, ITV support, and other items.[17] However, resupply of TALCEs was problematic. It was common for supply requests to take weeks to be filled, and often TACLEs in Afghanistan would send two airmen with a Form 9 to Seeb, Oman, to purchase TALCE-specific items.[18] One serious problem GRL units experienced was the inability to get Environmental Control Units (ECUs) at Kandahar. These units eventually arrived, but late. They were mission essential because the extreme heat made it nearly impossible to get adequate sleep in tents as early as March.[19]

At Manas, the CRG's aircraft maintenance flight had almost no parts or follow-on equipment to work the airflow.[20] In addition, they had trouble getting the correct Aircraft Ground Equipment (AGE), rolling stock, and other equipment to maintain their workload.[21] It took almost two months for the CRG to get everything they needed to begin airfield operations. According to General Kelly, this delay was a combination of three factors: the air flow was horrible and very unpredictable because of the C-5's maintenance reliability, the weather was horrendous, and the CRG was low on the CENTCOM priority list.[22]

Training and readiness of personnel proved to be adequate for these deployments. The training GRL units had accomplished included not only their primary career field, but the ability to operate in a bare base, hostile environment. Training as one will employ is essential. There were three reasons for the success of the 621st AMOG in Afghanistan: their annual participation in the Joint Readiness Training Center (JRTC) exercise held at Ft. Polk, LA, annual Air Base Ground Defense (ABGD) field exercises conducted at Ft. Dix, and in-garrison training required for rapid deployment into an austere, medium-threat environment. This training philosophy allowed the TALCEs to be very mobile, another lesson re-learned from these deployments.

Every two years US Army infantry brigades are certified combat ready by successfully completing JRTC, and TALCEs almost always participate. Coincidently, at Bagram the TALCE worked with the 10th Mountain Division, the same division that it had worked a JRTC with the previous April, and at Kandahar a Canadian TALCE which had worked with the 821st TALCE at JRTC eight months earlier worked once again with them. At Kandahar that teamwork continued, seamlessly and professionally.

ABGD involves two days in the classroom where every page of the *Airmen's Manual* is reviewed, and then the participants are deployed as a TALCE into a simulated combat environment for four days and three nights. This training was much more demanding than what was experienced at Bagram and Kandahar, and directly contributed to the TALCEs experiencing no fatalities. In addition, the 621st AMOG had created its own night vision goggle (NVG) MHE training course that was essential for its operations in Afghanistan, but one that HQ AMC did not know the TALCEs had. This allowed the TALCEs at both Bagram and Kandahar to conduct continuous night operations which was essential to their missions, especially during the first month in country.

Another essential aspect of AMOG training was monthly training sessions that took one hour and consisted of guest speakers who were subject matter experts. Termed Air Mobility In-House Exercises (AMEXes), they were created from the 821st AMS' innovative idea program. The first AMEX involved casualty notification and assistance and was conducted eighteen months before the TALCEs deployed to Afghanistan. The casualty notification officer from McGuire and the squadron chaplain both participated and led discussions including the composition of the notifying party, the duties of a family liaison officer, and how to plan and conduct a memorial service. Other AMEXes included finance and contracting, public health, media training (which came in handy more than ever imagined), Explosive Ordinance Disposal (EOD), force protection, family support, legal, and many others. This training was very similar to that conducted by the CRG.[23]

But a unique training need not planned for was discovered at Manas and bodes for future GRL emphasis. As General Kelly and the CRG began assessing the airfield, they realized they needed in depth civil engineering experience and contracting expertise.[24] Fortunately, the CRG received a Contingency Real Estate Team (CREST) from the Army Corps of Engineers twenty days into their deployment. They are experts at land assessment, value and negotiation and are authorized contracting agents for the US government.[25] Traditional USAF civil engineers build airfields and supporting structures but do not acquire land or lease work areas, and the CREST team was invaluable in acquiring the land and buildings at Manas that the CRG required.[26]

Education of users continued to be a concern during OEF. Many people still don't know what the TALCE community does, including some officers in AMC. The TALCEs in Afghanistan briefed more than one Army 0-6 in the 10th Mountain Division and 101st--some of the most mobile divisions in the US Army--on what TALCEs are, because they didn't know

before they worked with the TALCEs.[27] With the enormous emphasis that the Army Chief of Staff, General Eric Shinseki, has placed on making the Army more agile and mobile, this was hard to believe!

Command relations were not a significant problem during this contingency. At Kandahar, the USMC commander initially believed he owned the TALCE, but this issue was eventually resolved.[28] An Air Mobility Operations Squadron (AMOS) from the 621st AMOG at McGuire was deployed to PSAB just days after 9/11, and this unit managed the GRL assets within the AOR. The chain of command was clear: TALCE and MST units in the AOR were COCOM to TRANSCOM via the AMD at PSAB; the 86th CRG was placed under the control of CENTCOM instead of EUCOM.[29] However, the problem with command relations developed as TALCEs and CRG began to redeploy and to be replaced by Air Expeditionary Groups (AEGs). CENTAF was responsible for sourcing these AEGs, and coordination with AMC and USAFE for these replacements was very poor, with TALCEs remaining deployed much longer than the 30-60 days they were designed for.[30] CENTAF demanded that the GRL units leave their equipment in place for use by the AEGs; this would have crippled the TALCEs' and CRG's ability to reconstitute. After much "haggling," both GRL units eventually left with their equipment.[31] This problem is clearly related to educating users about GRL capability and limitations.

Although many reserve and guard personnel were utilized by the TALCEs during OEF, most of these were security forces personnel. Two-thirds of the USAF TALCE capability is in the ARC, but only a small percentage was mobilized for Operation ENDURING FREEDOM.[32] The back-to-back deployments the active duty TALCEs experienced to the Persian Gulf and then Afghanistan were demanding, and clearly the ARC TALCEs could have provided some relief.

The ARC TALCEs are simply the command and control (C2) portion; aerial port and maintenance come from other ARC units. From September 2001 until April of 2002, the 621st AMOG TALCEs deployed nearly continuously, and many wondered why the ARC TALCEs weren't being utilized much more. A reason is because the ARC TACLEs are not organized to deploy as quickly as traditional TALCEs. With over 72% of the aerial porters, 54% of all maintainers, and 67% of the command and control, the ARC could be much more effective in the TALCE world only if they were reorganized as traditional TALCEs.[33] Perhaps their lack of participation in ENDURING FREEDOM despite their tremendous capabilities and well trained and well led personnel will finally force HQ AMC to consider this proposed reorganization.

Summary

GRL units during OEF continued to accomplish their missions effectively, despite operating in the most austere and dangerous environment any GRL assets had operated in since Vietnam. While our model shows much improvement since the Gulf War, problems remained, especially in areas of supply, communications, education of users, and use of the ARC.

The war in Afghanistan was significant also because it reversed the usual transportation mode for logistics. Usually, in a contingency this size, ninety percent or more is moved via sealift; in Afghanistan ninety-five percent was moved via air.[34] As the operation matured, however, more was being moved via sea and land, although by the end of July 2002 seventy-two percent was still being moved via airlift.[35] This enormous demand on airlift represents a significant milestone in the history of GRL, or what the author Malcolm Gladwell terms "the tipping point." He defines the tipping point as "that magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spread like wildfire."[36] The Afghanistan airlift has caused TRANSCOM to reevaluate its airlift requirements. According to General Handy, "Even the

budgeted number of C-17s was significantly short of what we analyzed and studied as the minimum required to meet the military's transportation needs."[37] And the US Army's DCS (chief of operations), Lt Gen David D. McKiernan, testified to Congress that the need for more airlift has been the Army's biggest problem during operations in Afghanistan.[38] And with the need for more airlift comes the need to robust TALCEs, MSTs, and CRGs to support that airlift.

Notes

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[3] Ibid, 10.

[4] Maj Gen William Welser, USTRANSCOM Town Hall Update, USTRANSCOM, 19 October 2001.

[5] After Action Report—86 AMS, Operation ENDURING FREEDOM, Manas Airfield, Kyrgyzstan, 27 February 2002.

[6] "Peter J. Ganci, Jr. Air Base. E-mail from Maj Gen Bentley Rayburn, Air War College. 16 September 2002.

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[8] Author's personal experiences from Bagram and Kandahar.

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[12] Lt Col Philip A. Bossert, Jr., "821st AMS Lesson Learned: Operations NOBLE EAGLE and ENDURING FREEDOM, 24 October 2001.

[13] Lt Col Lawrence Gray, briefing to A/TA Convention, 8 November 2002.

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[31] Lt Col Mike Marra, e-mail, 27 January 2003; author's personal experiences.

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[33]Ibid.

[34] "Post Dispatch Questions." E-mail from Mr. Kent Beck, USTRANSCOM Historian, 8 August 2002.

[35] Ibid.

[36] Malcolm Gladwell, *The Tipping Point: How Little Things Can Make a Big Difference* (Boston: Little, Brown and Company, 2000), back cover.

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Chapter 5

Conclusions and Recommendations

My experience has been the half-life of information is tied directly to the average duration of a single assignment. For most military people that turns out to be three years.[1]

General Ronald R. Fogleman, CINCTRANS

Organizations, which deal with the collective efforts of men, are devoted to the processing of information and the generation of knowledge. Their ability to test the environment so as to correct error and reinforce truth makes them effective. Inability to learn is fatal.[2]

Jeffrey L. Pressman & Aaron Wildavsky, *Implementation*

Overview

A common human foible is to take for granted something which always seems to work and then to become complacent about that item. Repeated problems with that item become "manageable" because they don't appear to effect outcomes. Resolving those problems is then delayed, pushed to another day for others to deal with. The repeated success of TALCEs and the CRG during many demanding missions on recent contingencies illustrates this. Despite challenges with base availability and the condition of those bases, communications, supply, training, command relations, user familiarity with the GRL mission, and varying levels of total force integration, TALCEs and the 86th CRG accomplished their missions effectively, safely, and

professionally in some of the most harsh and forbidding environments any military forces have deployed into in decades. It is my belief that more attention needs to be given to GRL units so they can continue meeting future challenges.

Conclusion

The evolution of these GRL problems for DESERT SHIELD, ALLIED FORCE, and ENDURING FREEDOM are summarized in the table below.

GRL VARIABLES	DESERT SHIELD	ALLIED FORCE	ENDURING FREEDOM
Base availability	Fair	Good	Good
Communications	Poor	Good	Good
Supply	Poor	Poor	Fair
Training/Readiness	Good	Good	Very Good
Command Relations	Poor	Good	Fair
User Education	Poor	Poor	Poor
Total Force Integration	Poor	Poor	Poor
Mission Accomplished?	Yes	Yes	Yes

Base availability has always been challenging and will continue to be so in future contingencies. While diplomatic efforts negotiate basing rights, it is imperative for GRL units to have the highest state of readiness and to lean forward in preparation for the inevitable and sudden "green light" to deploy. And they must continue to be ready to operate in austere, hostile environments, bringing all their support with them. But they must also be prepared for joint, multinational, and interagency operations. The combined experiences of the 86th CRG at Manas

and the TACLEs in Afghanistan should be the planning factor for future worst case scenarios, and training should be geared accordingly.

Problems with communications have been mitigated, but GRL units need to have a higher priority in receiving the latest equipment. The CRG did not have all the radios they required at Manas because it was last on the USAFE priority list for these radios.[3] And TALCEs deployed during OEF suffered from a shortage of Iridium radios. However, ITV, GDSS, and general communications equipment showed major improvements over the course of these three contingencies, although problems remain.

One of the biggest problems remaining is adequately supplying GRL units once they are deployed. TALCEs and the CRG suffered from general resupply problems throughout all three operations, from force protection items to ECUs. With the enormous emphasis on agile combat support in our expeditionary Air Force, this is inexcusable. More needs to be done in this area.

Training and readiness of GRL personnel is effective, but the need for additional expertise was identified during OEF. Coalition Coordination Officers, CREST personnel, CE expertise, experience dealing with embassies, and other skills can be expected to be in big demand on future deployments and must be integrated into GRL training. The ability to perform one's primary career field in an austere, medium threat environment with many diverse players will also continue to drive intense training in garrison. Public affairs training along with force protection, public health, and other specialized training will continue to be mandatory.

Command relations and education of users continue to be challenges. Although the publicity TALCEs and the CRG received from many high-visibility deployments during OEF have been helpful, more work in these areas need to be done. And the biggest weak area for GRL throughout these three contingencies has been effectively integrating the ARC. With two-

thirds of TALCE capability in the ARC and so little of it used during OEF, active duty GRL assets are being burned out. This must change, for both operational and equity reasons.

Recommendations

Because GRL personnel accomplished their many demanding missions throughout the world in the last thirteen years so effectively despite facing many recurring problems, one could easily conclude that exceptionally well trained personnel can handle by themselves continuing shortfalls. It is my belief that only by actively pursuing the following recommendations will GRL units be in the strongest position to meet the unexpected and inevitable challenges on future operations:

- Users must be better educated about the capabilities and limitations of GRL units. AMC should re-look the affiliation program which heavily involves the AMOGs. The affiliation program teaches thousands of students a year from all four services on how users can get the most out of the air mobility system. Also, it should be a requirement that all newly selected flag officers from all the services visit an AMOG or the 86th CRG and see what they do. It would be to their self interest, because the success of a deployment they might lead someday could depend on their knowledge of GRL. Recurring problems with GRL command relations might also be mitigated with better education of senior officers.
- AMC must support GRL units much better. From providing adequate supplies and communications, to supporting the AMOG and CRG concepts, AMC must no longer take for granted its GRL units but rather focus on finally resolving these problems and positioning them to meet future demands.

- Eighteen months before they deployed into Afghanistan, a senior officer at AMC made a comment at a transportation conference to the effect that "he didn't know exactly what the AMOGs do, but we need those aerial porters and maintainers back on the flight lines." This comment is a perfect example of someone being "military history challenged," because hundreds of years of western military experience clearly show that units that train effectively in peacetime will perform much better in wartime than those units that are "thrown together" at the last minute. In his book *Citizen Soldiers*, Stephen Ambrose describes how individual replacements were sent to U.S. units in Western Europe during WWII, and how they often didn't survive the first few days at the front.[4] The same goes for GRL units—you can not patch together command and control from one base, aerial port from another, and maintenance from a third and hope to have an effective unit hours later, especially in a combat zone.
- To help resolve recurring supply problems, GRL units should specify on their daily SITREPs not only what they require, but when, and they should also specify a MAJCOM OPR to assist the deployed AMD. The AMD at PSAB was overwhelmed during OEF with supply requests, and clearly needed a better "reach-back" capability to AMC.

- There must be better crosstell among GRL units, not only within the USAF, but with our allies, sister services, US government agencies and international organizations. The American way of war can now be summarized as joint/multinational/interagency/ total force operations. In order to gather ideas from other GRL units, to better coordinate procedures, and to pave the way for effective and efficient contingenices, TRANSCOM

and AMC should host an annual GRL conference. Invited units should include the CRG, AMOGs, and similar units from the sister Services, ARC, and allied nations. Much could be learned from these conferences. In addition, this paper supports the current AMC initiative to rename AMOGs "CRGs." This will help standardize equipment and procedures and allow users to more easily understand GRL missions and capabilities.

- AMC should improve its trend analysis of GRL deployments. While there are many after action reports from TALCEs and the CRG, no organization has compared GRL lessons learned between different contingencies. It is inexcusable for some of the problems identified in the GRL model presented in this paper to exist for thirteen years! If more comparative analysis is accomplished, perhaps these problems will finally be resolved. Also, the nature of military transformation deems that this should be done.
- To be more effective, the ARC TACLEs should be reorganized as complete TALCEs similar to their active duty counterparts with C2, aerial port, and maintenance all in one unit. If this is done, the ARC TALCEs may be used for more than simply augmenting command posts, as stage managers, and as individual replacements.

Final Comments

The author of this paper had the unique privilege of interacting with ALCEs as a C-141 pilot during the Gulf War and later served as a TALCE commander at Bagram AB and Kandahar Airfield, Afghanistan, during ENDURING FREEDOM. With these two perspectives, I've gained an enormous appreciation and respect for GRL personnel who work long hours in god-forsaken locations under horrendous conditions to accomplish the seemingly impossible. Their work has been taken for granted too long, and with the emerging Global Mobility Task Force CONOPS, their role is becoming even more important. It is therefore imperative that the

recurring problems from DESERT SHIELD, ALIED FORCE, and ENDURING FREEDOM be finally resolved. With the war on terrorism expected to take years, if not decades, to fight, these issues must be tackled quickly. The following anecdote from my time at Kandahar with the 821st TALCE illustrates what is at stake:

> *It was towards dusk, and TALCE ops suddenly got word from the brigade Tactical Operations Center (TOC) that an Apache had gone down far from the airfield. Two Air Force HH-53s were launched immediately along with the brigade Quick Reaction Force (QRF). We were directed to keep the medevac ramp clear and to hold one of the C-130s currently on the ground for medevac. Soon, the airfield was over MOGed because of this medevac requirement. Within an hour, both Apache pilots were back at Kandahar and began getting treated at the Forward Surgical Team (FST), and a C-17 was quickly diverted by the AMD to Kandahar for a medevac to Ramstein.*
>
> *The following morning at the daily brigade stand-up, the US Army surgeon briefed the condition of the two pilots and said that the most seriously injured one should be arriving in Ramstein in seven hours. I looked at the USAF medevac rep and smiled; he quickly stood up and said, "Sir, excuse me, but that's not correct."*
>
> *Silence gripped the packed briefing room as all eyes starred at him. The captain then looked at his watch and gave the latest information he had been provided by the TALCE controllers just minutes before, "Sir, the pilot should be at Ramstein in approximately fifty-two minutes." The Task Force Rakkasan commander, Colonel Frank Wiercinski who had personally led Operation Anaconda, smiled and said "thanks—super work as usual!"*[5]

Our airmen at the front have done their jobs. We owe it to them to implement the recommendations of this paper. As the next battle in the war on terrorism looms, time is of the essence.

Notes

[1] General Ronald R. Fogleman, "National Security and the Defense Transportation system 2010: Hot Spots and Military Responses," Speech presented to the St. Louis Committee on Foreign Relations, 2 May 1994.

[2] Jeffrey L. Pressman & Aaron Wildavsky, *Implementation* (Berkley, CA: University of California Press, 1973), 125.

[3] After Action Report—86 AMS, Operation ENDURING FREEDOM, Manas Airfield, Kyrgyzstan, 27 February 2002.

[4] Stephen E. Ambrose, *Citizen Soldiers* (New York: Simon & Schuster, 1997), 286.

[5] Lt Col Phil Bossert, "Into the Belly of the Beast: TALCEs Deploy into Afghanistan," *Airlift/Tanker Quarterly*, Fall 2002, 37.

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